

ORIGINAL

OPEN MEETING



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MEMORANDUM
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Arizona Corporation Commission

DOCKETED

TO: THE COMMISSION

2009 SEP -3 P 12: 29

FROM: Utilities Division

ARIZONA CORPORATION COMMISSION
DOCKET CONTROL

SEP -3 2009

DATE: September 3, 2009

DOCKETED BY	
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RE: ARIZONA PUBLIC SERVICE COMPANY'S REQUEST FOR AUTHORIZATION FOR INCREASE IN RECOVERY GUARANTEE FOR PRODUCTION BASED INCENTIVES FOR DISTRIBUTED RENEWABLE GENERATION PROJECTS (DOCKET NO. E-01345A-09-0263) (BIFURCATED SUPPLEMENTAL REQUEST BY APS TO TREAT SCHOOL DISTRIBUTED ENERGY PROJECTS AS RESIDENTIAL PROJECTS)

The Arizona Corporation Commission ("Commission") approved the Arizona Public Service Company ("APS") 2009 Renewable Energy Standard and Tariff ("REST") Implementation Plan on December 18, 2008, in Decision No. 70654. As part of that Decision, the Commission approved the recovery of the costs of Production Based Incentives ("PBI") paid to non-residential customers with distributed renewable energy projects. The Commission approved cost recovery for all PBI contracts entered into with APS customers, up to a maximum dollar amount of \$77 million over the lifetime of the contracts.

On May 26, 2009, APS requested that the Commission increase the PBI recovery guarantee to \$220 million in order to fund the increasing demand for PBI incentives.

On July 30, 2009, APS filed a supplemental filing in this docket. APS stated in its filing that it would like to pursue non-residential distributed energy beyond the REST compliance requirements. APS indicated that there is increased interest in PBI reservation requests from schools at the same time that residential distributed project interest is lagging. APS proposes to offer schools an option in addition to the traditional PBI approach. APS proposes that school projects be classified as residential distributed energy projects, which would allow schools to receive up-front incentives paid by REST funding that had been allocated for residential projects. The energy derived by the school systems would apply to the residential distributed energy REST requirement. APS contends that it will not be able to fund the anticipated influx of school projects without this reallocation of funding and redefinition of residential distributed energy projects.

On August 26, 2009, the Commission voted to bifurcate the docket to consider APS' request for authorization for an increase in PBI recovery guarantees separately from APS' July 30, 2009 supplemental request related to school distributed energy projects. The Commission voted to approve the APS request for \$220 million in recovery guarantees. The Commission declined to vote on the APS July 30, 2009 supplemental filing and instead, set the matter over to a subsequent Open Meeting for further consideration.

This Staff Memorandum and the attached proposed order address the APS supplemental request to classify schools as distributed energy projects.

Background

The APS REST Implementation Plan offers two types of incentives: one-time Up-Front Incentives ("UFI") and quarterly Production Based Incentives.

The UFI incentives are currently offered only to residential and small-sized non-residential renewable energy systems.

On August 7, 2009, SunRun, Inc. ("SunRun") filed comments in the docket. SunRun also filed a request to intervene in the docket. SunRun recommended that the Commission reject the APS request to reclassify school projects as residential. SunRun further recommended against the transfer of residential funding to non-residential programs. SunRun pointed out that residential solar sales in the second half of the year are typically about 50 percent higher than the first half of the year.

On August 10, 2009, the Solar Alliance docketed a letter with comments concerning the APS filing of supplemental comments. The primary concern of the Solar Alliance is that too much of the residential funding would be diverted to schools, which would cause a shortage of residential project funds at the end of the year. The Solar Alliance recommends that, should the Commission decide to re-allocate funds, the re-allocation should be limited to \$10 million. The Solar Alliance also recommends that the Renewable Energy Credits ("RECs") from schools not be counted toward the REST residential requirements. In addition, the Solar Alliance recommends that such a re-allocation should be done on a temporary, one-time basis without permanent reclassification of schools as residential. Finally, the Solar Alliance recommends that, to increase activity in the residential market, the Commission should increase the incentive cap for Up-Front Incentives from the current 50 percent of total system cost to 60 percent of total system cost.

On August 10, 2009, the Rose Law Group, PC filed comments on behalf of SolarCity Corporation in support of APS' request for the re-allocation of residential funds to school projects. On August 14, 2009, Michele Reagan, State Representative for Arizona District 8, filed a letter in support of the APS funding transfer request. On August 19, 2009, BP Solar filed comments supporting APS' request and asked for consideration for additional funding for non-residential projects in the next year's budget.

On August 19, 2009, APS filed comments on Staff's report. APS again encouraged Commission approval of the transfer of residential funds to school projects and for those projects to count as residential projects in compliance with the REST Rules for 2009. APS said that without the funding, school projects may not be funded. APS noted that as of August 18, 2009, the residential funding had \$31.4 million remaining out of the 2009 budget of \$49.3 million.

On August 20, 2009, the Solar Alliance filed comments on Staff's proposed order. The Solar Alliance mentioned that when Salt River Project lowered its residential incentive by 30

cents per watt, there was a 400 percent surge in residential applications. The Solar Alliance suggests that the prospect of funds running out would have a similar effect on the APS residential program. The Solar Alliance is firmly against reclassifying RECs from schools as residential. The Solar Alliance is concerned about the precedent-setting potential of the reclassification of schools to residential applications. The Solar Alliance proposed to increase the residential cap to 60 percent so that parity is reached between the residential and non-residential sectors.

Between August 19 and August 21, 2009, a number of school districts filed comments supporting the APS request to transfer the residential funds to school projects. Commenters included Apache Junction Unified School District, Tempe School District No. 3, Murphy Elementary School District No. 21, Glendale Union High School District NO. 98, Paradise Valley Unified School District, Agua Fria Union High School District, Buckeye Elementary School District, Buckeye Union High School District, Chandler Unified School District, Gilbert Public Schools, Isaac School District, Littleton Elementary School District, Madison School District, Peoria Unified School District, Phoenix Elementary School District, Queen Creek School District, Roosevelt Elementary School District, and Scottsdale Unified School District.

On August 21, 2009, the Arizona Center for Law in the Public Interest filed comments on behalf of the Arizona School Board Association and the Arizona Association of School Business officials. These Associations support a one-time transfer of unused residential funds to school projects, but do not support the re-definition of schools as "residential" for the purposes of the REST Rules.

On August 24, 2009, SunRun, Inc. filed comments. SunRun believes that some residential funds should be shifted to schools, but only PBI incentives should be offered. SunRun recommends that RECs from schools not be counted as residential.

On August 24, 2009, the Residential Utility Consumer Office filed a letter in support of the APS funds transfer request and reclassification of schools to meet REST residential requirements. On August 25, 2009, Arizona State University ("ASU") filed comments in support of incentives to encourage projects such as those of ASU. On August 25, 2009, the Solar Division of Progressive Roofing filed comments stating that up-front incentives are crucial to the successful completion of school solar projects and that delays in approving the APS request could jeopardize the completion of the projects.

On August 25, 2009, SOLID Energy filed comments in favor of Chairman Mayes' Proposed Amendment No. 3. On August 25, 2009, APS filed comments in response to questions by Commissioner Pierce. Included were attachments showing renewable projects by location and zip code. On August 26, 2009, Charles Provine filed comments about the procedures used to administer and accept reservations in the APS incentive program. Comments from Karen Austermiller were filed on August 21 and 26, 2009. She expressed concern about APS' proposed transfer of residential funds and how that might cause the denial of her application.

History of Distributed Renewable Energy Requirements and Incentives

As the REST Rules were being developed, it was determined that a significant portion of the REST requirement should come from Distributed Renewable Energy Resources. The Commission determined that half of the Distributed Renewable Energy Requirement should come from residential systems and half should come from non-residential systems.

The utilities learned from customers and the renewable industry that residential customers are primarily motivated to buy a renewable system by a one-time, up-front incentive, while non-residential customers can be motivated by a production based incentive. This is why all residential systems receive UFI incentives and most non-residential systems receive a PBI incentive.

Staff Analysis

Staff has reviewed APS' supplemental filing and agrees with APS that a one-time allocation of funding to include schools will allow for more distributed energy projects to be installed in 2009 and 2010. Staff does not believe that schools should be classified as residential. However, Staff believes the RECs produced from this one-time allocation should be counted as residential.

Staff has reviewed SunRun's comments. Staff points out that according to reports on the APS website, only 23 percent of the residential incentive budget for 2009 had been spent or reserved by June 30, 2009. That amount is \$11,416,626 of the residential budget of \$49,300,000.

Staff points out that, using SunRun's comments about the second half of the year being 50 percent higher than the first, the historical trend suggests that only \$17-18 million in additional residential projects will be reserved in the second half of 2009. If one subtracts \$18 million from the remaining \$37,883,284, the amount likely to be unused at the end of 2009 is approximately \$19.8 million. Even if the residential sales **doubled** in the second half (to \$22,833,253), there would likely be \$15 million of unused residential funding on December 31.

Staff has reviewed the comments of the Solar Alliance. Staff agrees that a mechanism to ensure that residential funding does not run out before year end might be comforting. There are many possible solutions to this dilemma. One solution would be for the Commission to allocate \$10 million to schools at the September Open Meeting. This would leave approximately \$27 million for residential projects in the second half of 2009. Then on October 1, 2009, APS could be allowed to allocate up to 40 percent of the unreserved residential funds to schools. Finally, on December 1, 2009, APS could be allowed to allocate 40 percent of the still unreserved funds to schools. However, Staff believes this is unnecessary due to the large balance remaining in the residential incentive budget. As of August 21, 2009, over \$31 million of the residential funds were left unreserved.

Staff agrees with the Solar Alliance that this allocation should be on a temporary, one-time basis. Any school projects funded through the allocation of 2009 funds would be counted

toward the residential requirements for the life of each school project. This procedure would not be repeated again in the future without Commission approval.

Staff's analysis of the Solar Alliance's recommended incentive cap increase shows that such an increase would have the opposite effect of what the Solar Alliance intends. Instead of **increasing** the number of residential solar systems installed, it would actually **reduce** the number of systems installed. An illustrative example shows this unintended consequence:

If there is \$10 million available for residential projects, and the average total system cost is \$10,000, the incentive with the current 50 percent cap will be \$5,000 per system. However, under the Solar Alliance's proposed 60 percent cap, that same system will receive a \$6,000 incentive. So, for \$10 million under the 50 percent cap, APS will fund 2,000 solar systems (\$10 million / \$5,000 per system). However, under the proposed 60 percent cap, APS will only be able to fund 1,666 systems, a **reduction** of 334 systems.

This is only an illustrative example. If the funding were \$20 million or \$31 million, the end result would be the same: for each dollar amount, the higher cap would fund fewer systems per dollar, because the average incentive would increase.

Staff has reviewed the August 20, 2009 comments of the Solar Alliance. In relation to the Solar Alliance's recommendation of parity between the residential cap and the non-residential cap, Staff has a completely different approach. Rather than raising the residential cap from 50 percent to 60 percent, Staff believes another approach would be to consider, in future implementation plans, very gradually and carefully, over a number of years, lowering the non-residential cap from 60 percent down to 50 percent. As the Solar Alliance pointed out in one of its filings, merely lowering the cents per kWh incentive just lengthens the time it takes to reach the 60 percent cap, resulting in no cost savings to the ratepayers paying the REST surcharge.

Staff has reviewed the August 24, 2009 comments of SunRun, Inc. SunRun's suggestion that the residential funds transferred to schools be used only for PBI contracts is self-defeating. As numerous public comments stated at the August 26, 2009 Open Meeting, the financial institutions will not loan schools funds for PBI projects. They will, however, loan funds for projects with UFIs.

Staff reviewed the comments of Ms. Karen Austermiller. Staff checked with APS and APS verified that Ms. Austermiller has a confirmed reservation for a PV system. APS indicated that they are awaiting another reservation request from Ms. Austermiller for a solar water heater. APS has not received that reservation request as of the date of this report.

Several parties expressed concern that a transfer of funds from residential projects to schools would set a precedent. However, Staff believes the wording of the proposed order is clear that this would be a one-time event.

Staff has looked at the request of APS to transfer \$20 million of residential funding to school projects. First, this would result in more MW of solar than if the money were used for

residential. This is because the residential incentive (\$3 per Watt) is higher than the non-residential incentive (\$2.50 per Watt). In the example below, we assume that both types of systems have a 25 percent capacity factor (operating 2,190 hours per year).

Residential \$20 Million Scenario

\$20 million divided by \$3/Watt = 6.66 MW of residential solar systems
6.66 MW x 2,190 hours = 14,600,000 kWh

School \$20 Million Scenario

\$20 million divided by \$2.50/Watt = 8 MW of school solar systems
8 MW x 2,190 hours = 17,520,000 kWh

As shown above, if the \$20 million is used for school projects, an additional 2,920,000 kWh of annual renewable energy will be produced by the schools rather than the residences.

Since most of the systems will not be installed until the very end of 2009, or in some cases, in early 2010, an appropriate comparison will be to see the impact on the 2010 Distributed Renewable Energy requirements. In 2010, APS expects its Distributed Requirement to be 146,880,000 kWh, half of which (73,440,000 kWh) would come from residential and half would come from non-residential.

The increase in the residential REST requirement from 2009 to 2010 is estimated to be 29,143,000 kWh (from 44,297,000 to 73,440,000 kWh). So, in 2010, the impact of the \$20 million transfer to schools on the residential market will be 11,623,000 kWh less than the growth of the residential REST requirement (29,143,000 minus 17,520,000 kWh). In other words, there will be a **net growth** of 11,623,000 kWh in the residential kWh requirement in 2010 even with the school projects meeting some of the residential requirements. That 11,623,000 kWh net growth is approximately the same as the number of residential systems installed or reserved in the first half of 2009.

Based on Staff's analysis, Staff recommends that the Commission approve a one-time transfer of up to \$20 million in funds from residential applications to schools. Staff recommends that the RECs from school projects funded with this \$20 million be counted as part of the APS residential REST requirement. Staff also recommends that all other details (discussed below) requested by APS be approved, including the use of up-front incentives and the removal of the \$75,000 cap. These recommendations are being made for the following reasons:

1. The \$20 million funding of school projects will result in 8 MW of new renewable projects from schools compared to 6.66 MW of residential renewable projects. This results in more delivered kWh from the school projects. In the first year, that will result in 2,920,000 additional kWh. Over an assumed system life of 20 years, the school systems will provide 58,400,000 more kWh than residential systems.

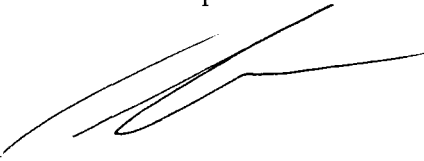
2. Although the school projects would replace a small portion of the residential requirement, the residential requirement is growing significantly more each year than the school systems' will be providing. Therefore, the residential market will have net gains in requirements in 2010 and 2011.
3. The market interest in renewables in 2009 is increasing slowly for residential systems, but is exploding for non-residential systems, including schools. Without the transfer of funding to schools, many proposed school projects will not be funded. The APS recovery guarantee of \$220 million does not include funding for the newly proposed school projects. This transfer is truly a one-time opportunity that will allow schools to take advantage of bonus depreciation and federal stimulus funding. It is doubtful that this opportunity will ever appear again.
4. If, as the solar industry contends, the residential market does greatly expand in 2010 and later years and APS is near to meeting the residential requirement (including the schools kWh), the Commission could, if it so desired, require APS to request additional funding to "make up" a portion of the money that was allocated in 2009.

Staff Recommendations

Staff recommends the Commission issue a supplemental Decision to the Decision that was voted on at the August 25-26, 2009 Open Meeting, containing the following requirements:

1. That Arizona Public Service Company be authorized to allocate, on a one-time basis, up to \$20 million of the 2009 Renewable Energy Standard and Tariff residential distributed energy funding to the funding of school projects.
2. That residential requests for incentives will continue to be processed on a first-come, first-served basis up to the total amount of residential funds available, less any commitments made to schools.
3. That if residential requests for distributed generation funds begin to pick up in 2009, and it appears as though any residential projects may go unfilled as a result of this Order, Arizona Public Service Company shall immediately file an Application with the Commission for additional funding of the Renewable Energy Standard and Tariff distributed generation program.
4. That school projects shall be provided an up-front incentive of \$2.25 per watt on a first-come, first-served basis.
5. That the current maximum up-front incentive cap of \$75,000 is waived for schools.

6. That the renewable energy and associated Renewable Energy Credits from school projects funded with the allocated \$20 million shall be counted toward compliance with the Renewable Energy Standard and Tariff residential distributed energy requirement.



Steven M. Olea
Director
Utilities Division

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ORIGINATOR: Ray Williamson

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BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES
Chairman
GARY PIERCE
Commissioner
PAUL NEWMAN
Commissioner
SANDRA D. KENNEDY
Commissioner
BOB STUMP
Commissioner

IN THE MATTER OF ARIZONA PUBLIC
SERVICE COMPANY’S REQUEST FOR
AUTHORIZATION FOR INCREASE IN
RECOVERY GUARANTEE FOR
PRODUCTION BASED INCENTIVES FOR
DISTRIBUTED RENEWABLE
GENERATION PROJECTS (BIFURCATED
SUPPLEMENTAL REQUEST BY APS TO
TREAT SCHOOL DISTRIBUTED ENERGY
PROJECTS AS RESIDENTIAL PROJECTS)

DOCKET NO. E-01345A-09-0263
DECISION NO. _____

SUPPLEMENTAL ORDER

Open Meeting
September 9, 2009
Phoenix, Arizona

BY THE COMMISSION:

FINDINGS OF FACT

1. Arizona Public Service Company (“APS” or “the Company”) is certificated to provide electricity as a public service corporation in the State of Arizona.
2. The Arizona Corporation Commission (“Commission”) approved APS’ 2009 Renewable Energy Standard and Tariff (“REST”) Implementation Plan on December 18, 2008, in Decision No. 70654. As part of that Decision, the Commission approved the recovery of the costs of Production Based Incentives (“PBI”) paid to non-residential customers with distributed renewable energy projects.
3. The Commission approved cost recovery for all PBI contracts entered into with APS customers, up to a maximum dollar amount of \$77 million over the lifetime of the contracts.

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2 guarantee to \$220 million in order to fund the increasing demand for PBI incentives.

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4 filing that it would like to pursue non-residential distributed energy beyond the REST compliance
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8 projects, which would allow schools to receive up-front incentives paid by REST funding that had
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10 the residential distributed energy REST requirement. APS contends that it will not be able to fund
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15 July 30, 2009 supplemental request related to school distributed energy projects. The Commission
16 voted to approve the APS request for \$220 million in recovery guarantees. The Commission
17 declined to vote on the issues raised in the APS July 30, 2009 supplemental filing, and instead, set
18 the matter over to a subsequent Open Meeting for further consideration.

19 Background

20 8. The APS REST Implementation Plan offers two types of incentives: one-time Up-
21 Front Incentives ("UFI") and quarterly Production Based Incentives.

22 9. The UFI incentives are currently offered only to residential and small-sized non-
23 residential renewable energy systems.

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25 SunRun also filed a request to intervene in the docket. SunRun recommended that the
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20 Staff Analysis

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25 that this would be a one-time event.

26 32. Staff has looked at the request of APS to transfer \$20 million of residential funding
27 to school projects. First, this would result in more MW of solar than if the money were used for
28 residential. This is because the residential incentive (\$3 per Watt) is higher than the non-

1 residential incentive (\$2.50 per Watt). In the example below, we assume that both types of
2 systems have a 25 percent capacity factor (operating 2,190 hours per year).

3 Residential \$20 Million Scenario

4 \$20 million divided by \$3/Watt = 6.66 MW of residential solar systems
5 6.66 MW x 2,190 hours = 14,600,000 kWh

6 School \$20 Million Scenario

7 \$20 million divided by \$2.50/Watt = 8 MW of school solar systems
8 8 MW x 2,190 hours = 17,520,000 kWh

9 33. As shown above, if the \$20 million is used for school projects, an additional
10 2,920,000 kWh of annual renewable energy will be produced by the schools rather than the
11 residences.

12 34. Since most of the systems will not be installed until the very end of 2009, or in
13 some cases, in early 2010, an appropriate comparison will be to see the impact on the 2010
14 Distributed Renewable Energy requirements. In 2010, APS expects its Distributed Requirement to
15 be 146,880,000 kWh, half of which (73,440,000 kWh) would come from residential and half
16 would come from non-residential.

17 35. The increase in the residential REST requirement from 2009 to 2010 is estimated to
18 be 29,143,000 kWh (from 44,297,000 to 73,440,000 kWh). So, in 2010, the impact of the \$20
19 million transfer to schools on the residential market will be 11,623,000 kWh less than the growth
20 of the residential REST requirement (29,143,000 minus 17,520,000 kWh). In other words, there
21 will be a **net growth** of 11,623,000 kWh in the residential kWh requirement in 2010 even with the
22 school projects meeting some of the residential requirements. That 11,623,000 kWh net growth is
23 approximately the same as the number of residential systems installed or reserved in the first half
24 of 2009.

25 36. Based on Staff's analysis, Staff recommends that the Commission approve a one-
26 time transfer of up to \$20 million in funds from residential applications to schools. Staff
27 recommends that the RECs from school projects funded with this \$20 million be counted as part of
28 the APS residential REST requirement. Staff also recommends that the details discussed below,

requested by APS, be approved, including the use of up-front incentives and the removal of the \$75,000 cap. These recommendations are being made for the following reasons:

- The \$20 million funding of school projects will result in 8 MW of new renewable projects from schools compared to 6.66 MW of residential renewable projects. This results in more delivered kWh from the school projects. In the first year, that will result in 2,920,000 additional kWh. Over an assumed system life of 20 years, the school systems will provide 58,400,000 more kWh than residential systems.
- Although the school projects would replace a small portion of the residential requirement, the residential requirement is growing significantly more each year than the school systems' will be providing. Therefore, the residential market will have net gains in requirements in 2010 and 2011.
- The market interest in renewables in 2009 is increasing slowly for residential systems, but is exploding for non-residential systems, including schools. Without the transfer of funding to schools, many proposed school projects will not be funded. The APS recovery guarantee of \$220 million does not include funding for the newly proposed school projects. This transfer is truly a one-time opportunity that will allow schools to take advantage of bonus depreciation and federal stimulus funding. It is doubtful that this opportunity will ever appear again.
- If, as the solar industry contends, the residential market does greatly expand in 2010 and later years and APS is near to meeting the residential requirement (including the schools kWh), the Commission could, if it so desired, require APS to request additional funding to "make up" a portion of the money that was allocated in 2009.

CONCLUSIONS OF LAW

1. Arizona Public Service Company is a public service company within the meaning of Article XV, Section 2 of the Arizona Constitution.

2. The Commission has jurisdiction over Arizona Public Service Company and the subject matter of the joint application.

3. It is in the public interest to approve Arizona Public Service Company's supplemental request, as discussed herein.

ORDER

IT IS THEREFORE ORDERED that Arizona Public Service Company is hereby authorized, on this one-time basis, to allocate up to \$20 million of the 2009 Renewable Energy Standard and Tariff residential distributed energy funding to the funding of school projects.

...

1 IT IS FURTHER ORDERED that residential requests for incentives will continue to be
2 processed on a first-come, first-served basis up to the total amount of residential funds available,
3 less any commitments made to schools.

4 IT IS FURTHER ORDERED that if residential requests for distributed generation funds
5 begin to pick up in 2009, and it appears as though any residential projects may go unfilled as a
6 result of this Order, Arizona Public Service Company shall immediately file an Application with
7 the Commission for additional funding of the Renewable Energy Standard and Tariff distributed
8 generation program.

9 IT IS FURTHER ORDERED that school projects funded wit this \$20 million shall be
10 provided an up-front incentive of \$2.25 per watt on a first-come, first-served basis.

11 IT IS FURTHER ORDERED that the current maximum up-front incentive cap of \$75,000
12 is waived for schools funded with this \$20 million.

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1 IT IS FURTHER ORDERED that the renewable energy and associated Renewable Energy
2 Credits from school projects funded with this \$20 million shall be counted toward compliance with
3 the Renewable Energy Standard and Tariff residential distributed energy requirement.

4 IT IS FURTHER ORDERED that this decision shall become effective immediately.

5
6 **BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION**

7
8 CHAIRMAN

COMMISSIONER

9
10
11 COMMISSIONER

COMMISSIONER

COMMISSIONER

12
13 IN WITNESS WHEREOF, I, ERNEST G. JOHNSON,
14 Executive Director of the Arizona Corporation Commission,
15 have hereunto, set my hand and caused the official seal of this
16 Commission to be affixed at the Capitol, in the City of Phoenix,
17 this _____ day of _____, 2009.

18
19 _____
ERNEST G. JOHNSON
EXECUTIVE DIRECTOR

20
21 DISSENT: _____

22
23 DISSENT: _____

24 SMO:RTW:lh\CH

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